

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P554849

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-84-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P554849  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-2HI-50-UNV-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

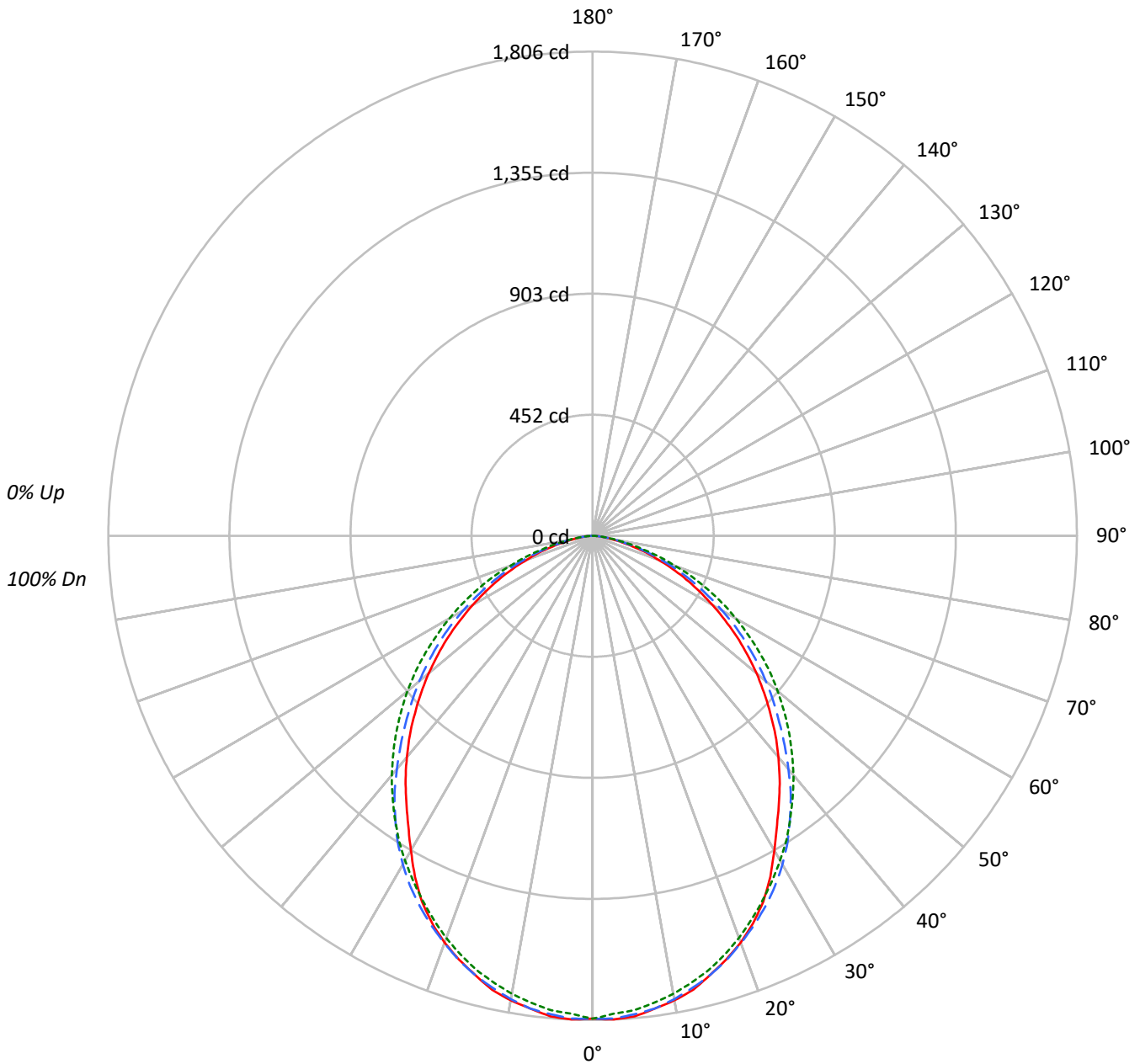
Lumens per Lamp: N/A  
Luminaire Lumens: 4165.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9695	9695	9695
5°	9720	9679	9596
10°	9617	9590	9481
15°	9446	9446	9338
20°	9246	9258	9139
25°	8942	9053	8909
30°	8420	8799	8691
35°	7956	8433	8447
40°	7569	7978	8187
45°	7136	7495	7879
50°	6681	7062	7544
55°	6162	6571	7136
60°	5549	5997	6637
65°	4899	5332	6036
70°	4083	4541	5128
75°	3209	3627	4015
80°	2294	2551	2830
85°	1494	1494	1408



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.6	4.1
10°-20°	476.4	11.4
20°-30°	696.2	16.7
30°-40°	790.3	19.0
40°-50°	762.9	18.3
50°-60°	629.3	15.1
60°-70°	419.1	10.1
70°-80°	187.5	4.5
80°-90°	33.5	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1342.3	32.2
0°-40°	2132.6	51.2
0°-60°	3524.8	84.6
0°-90°	4165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4165.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1801	1801	1801	1801	1801	
5°	1799	1798	1792	1782	1776	170
15°	1695	1700	1695	1688	1676	478
25°	1506	1518	1524	1513	1500	690
35°	1211	1228	1284	1291	1286	759
45°	938	954	985	1030	1035	723
55°	657	668	700	739	760	586
65°	385	395	419	448	474	381
75°	154	163	174	183	193	169
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1801.3	1801.3	1801.3	1801.3	1801.3
2.5°	1806.1	1806.8	1802.6	1791.6	1784.6
5°	1799.2	1798.5	1791.6	1781.9	1776.3
7.5°	1779.1	1780.5	1778.4	1764.6	1757.0
10°	1759.7	1760.4	1754.9	1743.8	1734.8
12.5°	1734.8	1734.1	1726.5	1721.0	1706.5
15°	1695.4	1699.5	1695.4	1687.8	1676.0
17.5°	1657.3	1657.3	1660.1	1646.9	1637.9
20°	1614.4	1616.5	1616.5	1606.1	1595.7
22.5°	1564.6	1570.8	1572.9	1561.8	1549.4
25°	1505.8	1517.5	1524.5	1513.4	1500.2
27.5°	1434.5	1452.5	1473.3	1464.9	1450.4
30°	1354.9	1381.2	1415.8	1408.9	1398.5
32.5°	1279.5	1305.8	1353.5	1350.8	1345.2
35°	1211.0	1227.6	1283.6	1290.6	1285.7
37.5°	1145.9	1161.2	1213.8	1229.7	1225.5
40°	1077.4	1094.0	1135.6	1163.9	1165.3
42.5°	1009.6	1025.5	1059.4	1100.3	1100.3
45°	937.6	953.6	984.7	1029.7	1035.2
47.5°	867.1	883.7	914.1	959.1	968.1
50°	797.9	813.1	843.5	887.1	901.0
52.5°	725.9	742.5	772.3	812.4	832.5
55°	656.7	667.8	700.3	739.0	760.5
57.5°	584.7	595.1	631.8	665.0	687.1
60°	515.5	528.7	557.1	591.0	616.6
62.5°	449.1	462.9	487.2	516.9	546.0
65°	384.7	395.1	418.7	448.4	474.0
67.5°	322.5	331.5	355.0	375.8	402.7
70°	259.5	271.3	288.6	308.6	325.9
72.5°	209.0	213.8	228.4	242.9	260.9
75°	154.3	162.6	174.4	182.7	193.1
77.5°	110.7	115.6	122.5	129.4	139.1
80°	74.0	76.1	82.3	83.7	91.3
82.5°	45.0	46.4	47.7	48.4	51.2
85°	24.2	24.2	24.2	22.8	22.8
87.5°	13.8	13.8	11.8	9.7	6.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)